

Remarks/Arguments:

On page 2, the Official Action rejects claims 1, 5 and 11 under 35 U.S.C. § 103(a) as being unpatentable over Miki (US 5,181,246) in view of Moriyama (US 6,571,090) and further in view of Shunichi (JP 10-327130). It is respectfully submitted, however, that these claims are patentable over the cited art of record for the reasons set forth below.

Applicant's invention, as recited by claim 1, includes features which are neither disclosed nor suggested by the art of record, namely:

... wherein the transmission device is configured to transmit the data repeatedly without changing the transmission communication method during a time period in which a receiving device is configured to sequentially switch through a plurality of different reception communication methods,

each of the plurality of different reception communication methods formed by combining a respective one of a plurality of different demodulation methods and a respective one of the plurality of carrier frequencies at different times during the time period, each of the plurality of different reception communication methods formed of respectively different combinations of the different demodulation methods and carrier frequencies. (Emphasis Added)

Claim 1 relates to a transmitter and receiver that utilize various modulation/demodulation methods and carrier frequencies. Specifically, the transmitter repeatedly transmits the same data without changing the transmission method (maintaining the same modulation method and carrier frequency). During this time period, the receiving device switches through a plurality of different reception methods (each reception method has a different combination of a demodulation method and carrier frequency). Support for these features can be at least shown in Fig. 1 and described on pages 22-24 of the specification. No new matter has been added.

In Fig. 2, Moriyama suggests a switch 93 that switches between receiving signals on antennas 91-1 and 91-2. These received signals are then down converted using a set carrier frequency in receiving part 94 and demodulated using a set demodulation method in demodulating part 31. Specifically, Moriyama's receiving part 94 and demodulating part 31 utilize the same carrier frequency and same demodulation method for both antennas 91-1 and 91-2. Moriyama only has one carrier frequency and one demodulation method, and therefore only has one reception communication method.

Furthermore, the first frequency and second frequency recited in Moriyama's col. 9, line 66 to col. 10, line 52 are frequencies for performing switching and sampling (these frequencies are not carriers for performing demodulation). Thus, even though Moriyama can switch between two antennas, the same carrier frequency and demodulation method is utilized for both antennas (Moriyama only teaches one reception communication method).

Applicant's claim 1 is different than the art of record because the transmitter repeatedly transmits data utilizing the same transmission method while the receiver switches through a plurality of different combinations of demodulation methods and carrier frequencies ("*... wherein the transmission device is configured to transmit the data repeatedly without changing the transmission communication method during a time period in which a receiving device is configured to sequentially switch through a plurality of different reception communication methods, each of the plurality of different reception communication methods formed by combining a respective one of a plurality of different demodulation methods and a respective one of the plurality of carrier frequencies at different times during the time period, each of the plurality of different reception communication methods formed of respectively different combinations of the different demodulation methods and carrier frequencies.*").

Shown in Applicant's Fig. 1, transmission device 100 comprises a plurality of modulators 20-24 and a plurality of carrier frequencies 10-13. Similarly, reception device 101 comprises a plurality of demodulators 50 and a plurality of carrier frequencies 40-43. During operation, transmission device 100 selects a modulation method and a carrier frequency to which the data is repeatedly transmitted. The

reception device 101 then switches through the plurality of different reception methods by combining a respective one of a plurality of different demodulation methods and a respective one of a plurality of different carrier frequencies.

For example, assuming that the plurality of modulation/demodulation methods are quadrature phase shift keying (QPSK) and quadrature amplitude modulation (QAM), and the plurality of carrier frequencies are 1 MHz and 3 MHz. An example of switching would be as follows. The transmitter may select a modulation method of QAM and a carrier frequency of 3 MHz. The transmitter would then repeatedly transmit data utilizing these parameters. During a time period, the reception device may then switch through a plurality of different reception communication methods. For example, the reception device would switch between the four possible combinations of reception communication methods (QPSK, 1 MHz), (QPSK, 3 MHz), (QAM, 1 MHz) and (QAM, 3 MHz). Thus, the system (as recited by claim 1) switches between the plurality of different reception communication methods.

Miki is relied upon for transmitting radio signals utilizing a plurality of carrier frequencies. Shunichi is relied upon for changing modulation methods after a predetermined time. Miki and Shunichi, however, do not make up for the deficiencies of Moriyama with respect to Applicant's claim 1. Thus, claim 1 is patentable over the art of record for at least the reasons set forth above.

On page 6, the Official Action rejects claims 2 and 12 under a combination of Moriyama, Miki, Shunichi and Granstrom (US 2005/0215206). Granstrom is relied upon for disclosing a switch of a transmission method. Granstrom, however, does not make up for the deficiencies of Moriyama, Miki, and Shunichi. Thus, claims 2 and 12 are also patentable over the art of record for at least the reasons set forth above with respect to claim 1.

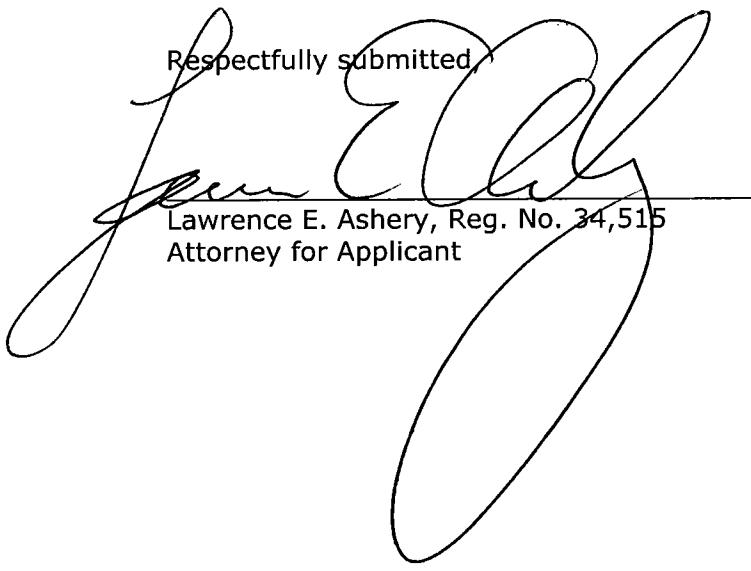
On page 7, the Official Action rejects claims 4, 6-10 and 13-20 under a combination of Moriyama, Miki, Shunichi and Moon (US 7,027,782). Moon is relied upon for a communication device notifying another device of a desirable method for communication. Moon, however, does not make up for the deficiencies of Moriyama, Miki and Shunichi. Thus, claims 4, 6-10 and 13-20 are also patentable over the art of record for at least the reasons set forth above with respect to claim 1.

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In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,


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